



Transportation Fact Sheet

Intelligent Transportation Systems (ITS)

Access to and within the National Park System has been a defining experience for generations of visitors.

The National Park Service (NPS) coordinates the planning and implementation of transportation systems that improve the visitor experience and care for national parks by:

- Preserving natural and cultural resources.
- Enhancing visitor safety and security.
- Protecting plant and animal species.
- Reducing congestion.
- Decreasing pollution.

NPS is committed to being a leader in pursuing strategies that can help make park units more enjoyable, cleaner, quieter, and more sustainable for present and future generations.

For more information, visit nps.gov/transportation/alt/

Transportation Program
Mark Hartsoe, Coordinator
1201 Eye St. NW
Washington, DC 20005
202-513-7021
mark_hartsoe@nps.gov

National Park Service
Jonathan Jarvis, Director

U.S. Department of the Interior
Ken Salazar, Secretary

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EXPERIENCE YOUR AMERICA

National Park Service units are using new technologies to improve the visitor experience, reduce traffic congestion on park roads and in parking areas, protect natural and cultural resources, and provide traveler information.



To provide visitors and residents with useful travel information, Acadia National Park uses ITS technologies like automated bus signs with voice announcements of bus arrival times and destinations.

Visitation to national park units is expected to grow over the coming years, leading to increased traffic congestion on park roads and in parking areas. Along with causing visitor frustration, traffic congestion can result in air and noise pollution, haze, and impacts to fragile natural and cultural resources.

To help improve the visitor experience, NPS is beginning to use Intelligent Transportation Systems (ITS), which are advanced information and communications technologies that can improve transportation safety and efficiency. ITS technologies include traffic detectors, weather sensors, computer databases, and variable message signs.

ITS allows NPS units to provide visitors and local residents with up-to-the-minute information on roadway congestion, parking and lodging availability, shuttle bus schedules, and other useful information. ITS helps visitors make informed travel decisions in a variety of ways, including:

- Rerouting traffic to available parking areas and to alternative transportation options during times of congestion.
- Directing visitors to less crowded entrances, attractions, and parking areas.
- Monitoring and reporting emergency incidents in order to clear them quickly and reroute traffic.

Intelligent Transportation Systems (ITS)

Three of the NPS units implementing ITS are highlighted below.

Rocky Mountain National Park in Colorado

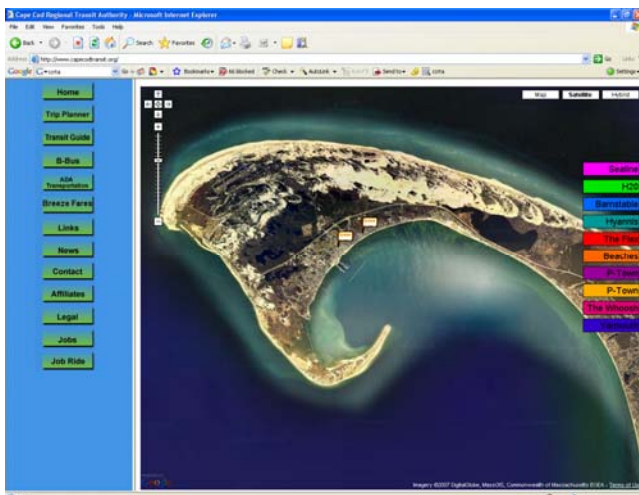
To reduce congestion at its entrance stations, Rocky Mountain National Park has implemented an automated lane at the Beaver Meadows Entrance Station. Rocky Mountain National Park annual pass holders, employees, and vendors enter using a designated lane and are recognized either by a transponder on their vehicles or when they swipe a card through a magnetic card reader. This reduces congestion and wait times for all visitors, as well as personnel costs.



Automated entrance lane at Beaver Meadows, Rocky Mountain National Park. Photo: Roger Surdahl, FHWA-CFLHD

Cumberland Gap National Historical Park in Kentucky and Tennessee

NPS, the Federal Highway Administration, the Kentucky Transportation Cabinet, and the Tennessee Department of Transportation used ITS to improve the safety and efficiency of travel through the Cumberland Gap Tunnel as it was being constructed in 2000. Traffic surveillance and control features, such as closed circuit cameras and magnetic loop detectors, were used to monitor traffic and to count vehicles within the tunnel. Tunnel operations teams used dynamic message signs, AM and FM radio signals, and lane use signals to communicate with drivers approaching the tunnel. For example, signs were used to let drivers know when vehicles carrying hazardous materials were being escorted through the tunnel. In addition, variable speed limit signs were used to change the speed limit during hazardous conditions or emergencies. NPS is now working with its partners to expand the use of ITS in the vicinity of the Cumberland Gap Tunnel to manage traffic and provide travelers with information related to the operation of the tunnel, including information on congestion, incidents, weather-related problems, and tourist attractions.



CCRTA's real-time transit information system.

Cape Cod National Seashore in Massachusetts

Working with Bridgewater State College and the Cape Cod Regional Transit Authority (CCRTA), Cape Cod National Seashore is participating in the development of a real-time transit information system. Several of the CCRTA bus lines stop at National Seashore sites and all are equipped with bicycle racks. Visitors can check the position of CCRTA buses using a computer or mobile phone with data service and plan their visits accordingly.

